

Claims

1. A method of processing a sound sequence, in which:
a) a spectral transform is applied to said sequence
5 to obtain spectral coefficients varying as a function of time in said sequence, characterized in that it furthermore comprises the following steps:
b) at least one subsequence repeated in said sequence
10 is determined by statistical analysis of said spectral coefficients, and
c) start and end instants of said subsequence in the sound sequence are evaluated.
- 15 2. The method as claimed in claim 1, characterized in that it furthermore comprises a step:
d) of extraction of the subsequence so as to store, in a memory, sound samples representing said subsequence.
- 20 3. The method as claimed in claim 2, characterized in that the extraction of step d) relates to at least one subsequence whose duration is the biggest and/or one subsequence whose frequency of repetition is the
25 biggest in said sequence.
4. The method as claimed in one of claims 1 to 3, in which the sound sequence is a piece of music comprising a succession of subsequences from among at least an
30 introduction, a verse, a refrain, a bridgeway, a theme, a motif, a movement, characterized in that, in step c), at least the respective start and end instants of a first subsequence and of a second subsequence are determined.
- 35 5. The method as claimed in claim 4, taken in combination with claim 3, characterized in that the

first subsequence corresponds to a verse and the second subsequence corresponds to a refrain.

6. The method as claimed in one of claims 4 and 5,
5 taken in combination with claim 2, characterized in that, in step d), a first and a second subsequence are extracted so as to obtain, on a memory medium, a sound resume of said piece of music comprising at least the first subsequence strung together with the second
10 subsequence.

7. The method as claimed in claim 6, in which the extracts of the subsequences are non-contiguous in time, characterized in that it furthermore comprises
15 the following steps:

d1) detecting at least one cadence of the first subsequence and/or of the second subsequence so as to estimate the mean duration of a bar at said cadence, as well as at least one end segment of the first
20 subsequence and at least one start segment of the second subsequence, of respective durations corresponding substantially to said mean duration and isolated in the sequence by an integer number of mean durations,
25 d2) generating at least one transition bar of duration corresponding to said mean duration and comprising an addition of the sound samples of at least said end segment and of at least said start segment,
d3) and concatenating the first subsequence, the
30 transition bar or bars and the second subsequence to obtain a stringing together of the first and of the second subsequence.

8. The method as claimed in claim 7, characterized in
35 that step d1) comprises a splitting into at least two windows, of rectangular type, of Hanning type, of staircase Hanning type, or preferably of type

comprising a flank that rises, a plateau and a flank that descends over time.

9. The method as claimed in one of claims 7 and 8,
5 characterized in that step d2) comprises a beat-synchronous reconstruction.

10. The method as claimed in claim 9, characterized in that, in step d1), the metric of the first subsequence
10 and/or of the second subsequence are/is determined, and in that step d2) comprises an in-time beat-synchronous reconstruction.

11. The method as claimed in one of claims 9 and 10,
15 characterized in that, in step d1), said end and start segments are determined in such a way that they commence with a first bar time, and in that step d2) comprises an aligned beat-synchronous reconstruction.

20 12. A computer program product, stored in a computer memory or on a removable medium able to cooperate with a computer reader, characterized in that it comprises instructions for running the steps of the method as claimed in one of the preceding claims.